

REMARKS:

I. Amendments.

Claims 1 - 6 are pending in the application, claims 7-18 having been withdrawn as a result of a restriction requirement.

Claims 1-6 have each been amended in response to the Examiner's objection to remove symbols found within the margins of the first line of each of these claims. Claims 1 and 2 have also been amended in response to the Examiner's objection to remove improper capitalization within each of these claims.

As a result of these amendments, Applicants assert that the Examiner's Claim Objections have been adequately addressed.

II. Rejection under 35 U.S.C. § 102 over Miura.

Claims 1-3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Miura, et al., U.S. Patent No. 5,625,095 (“Miura”). In the Office Action, the Examiner states that

Miura discloses a process of separating acetaldehyde from the liquid containing acetaldehyde and methyl iodide [sic] by distillation; further, selectively extracting acetaldehyde with water (see col.7, lines 15-18). The various compositions are analyzed at the time of charging the starting liquid, distillation condition, and top withdrawn liquid composition (see col. 12, lines 20-43) Furthermore, removal of the top withdrawn liquid from the system makes it possible to control the acetaldehyde concentration in the reactor (see col. 12, lines 45-47). In addition, the composition of extraction materials (top withdrawn liquid, extracts, raffinate, distillate, and the bottom products are shown below (see col. 13, line 34): This is identical with the claims.

Applicants respectfully traverse the rejection.

Claims 1 and 2 are independent claims. Claim 3, as well as claims 4-6, depend from claim 2. Applicants respectfully assert that this rejection is improper because Miura does not teach every element of the independent claims. Independent claims 1 and 2 recite measuring the density of an overhead obtained from the distillation of a mixture comprising methyl iodide and acetaldehyde. Miura, neither in the portions cited by the Examiner nor anywhere else, does not disclose measuring the density of this overhead.

Independent claims 1 and 2 also recite that, after conducting this density measurement, at least one process variable associated with the distillation is adjusted in response to the measured density or a relative concentration calculated from the density. The specification of the present invention teaches that the relevant concentrations of methyl iodide and acetaldehyde can be correlated to the measured density of the overhead from the distillation. The Examiner asserts that Miura “teaches removal of the top withdrawn liquid from the system makes it possible to

control the acetaldehyde concentration in the reactor,” e.g., 400 ppm or lower. While Miura may teach that conducting the distillation to remove acetaldehyde results in lower acetaldehyde concentration in the reactor and may disclose the analyzed conditions, including concentrations, associated with a process at certain points, Miura does not say that process parameters associated with the distillation are adjusted in response to a density measurement of the overhead of the distillation or relative concentrations obtained therefrom. Moreover, as previously provided, these analyzed conditions cited by the Examiner as being taught by Miura do not include density. Accordingly, Applicants respectfully assert that the rejection of claims 1-3 as being anticipated by Miura has been overcome.

IV. Rejection under 35 U.S.C. § 103(a) over Miura.

Claims 1-6 were rejected under 35 U.S.C. § 103(a) as being obvious over Miura. In the Office Action, the Examiner substantially repeats the points made with respect to the rejections over Miura under 35 U.S.C. § 102(b) and adds that “the instant invention differs from the prior art in that the adjustments of heating rate and the water feed rate to the extraction are not shown in the prior art.” The Examiner concludes these additional features would have been obvious in view of Miura. The Applicants respectfully traverse the rejection.

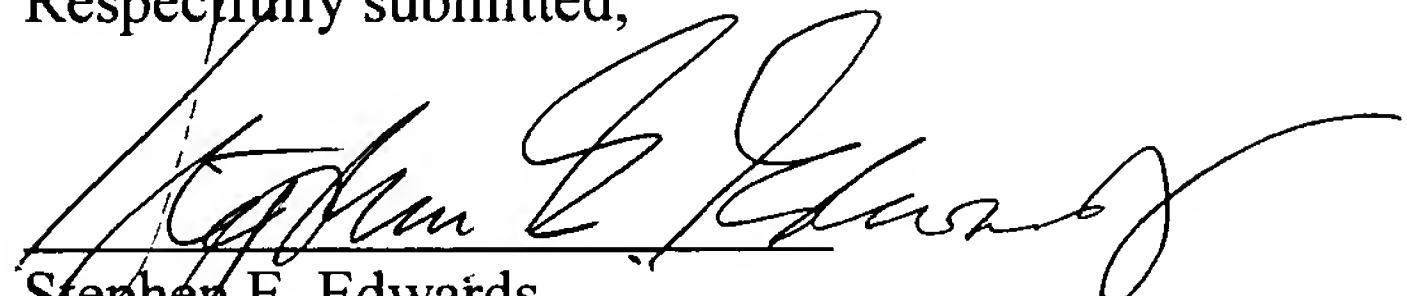
Without commenting on the Examiner’s position on heating rate and the water feed rate, Applicants respectfully asserts that the rejection is improper for the same reasons elucidated respecting the rejection over Miura under 35 U.S.C. § 102(b). Miura does not teach or suggest recited elements of independent claim 1 or independent claim 2, from which all other pending claims depend. Miura does not teach or suggest measuring the density of the overhead of the distillation or adjusting a process parameter in response to this density measurement, or a relative

concentration calculated therefrom. For at least this reason, Applicants assert that the rejection over 35 U.S.C. § 103(a) has been overcome.

CONCLUSIONS

As a result of the foregoing amendments and remarks, Applicants respectfully submit that this case is in condition for allowance.

Respectfully submitted,



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